

IN THE CLAIMS

[Claim 1 has been amended as follows:]

1. (Currently Amended) An interface unit for use with an electrophysiology measurement system having an electrophysiology monitoring system and a plurality of catheter-mounted sensors respectively connected to electrical connectors, said interface unit having an outer surface and comprising:

a plurality of externally accessible unit electrical connectors disposed at said outer surface, respectively adapted for releasably mating with a one of said sensor electrical connectors in a mating configuration;

an arrangement for producing predetermined interconnections among said unit connectors, said arrangement adapted for communicating with said electrophysiology monitoring system; [and]

a signal generator connected to said arrangement which emits an output signal, adapted to be received by said electrophysiology monitoring system via said arrangement, containing information unique to and originating from said interface unit and designating said configuration, for use by said electrophysiology monitoring system; and

at least one label layer placeable over said outer surface and carrying visible indications of said interconnections to form said configuration.

2. (Original) An interface unit as claimed in claim 1 further comprising a housing, and wherein said signal generator emits said output signal containing information unique to said housing.

3. (Original) An interface unit as claimed in claim 2 wherein said signal generator comprises a read-only memory containing said information unique to said housing.

[Cancel Claim 4.]

4. (Cancelled)

[Claim 5 has been amended as follows:]

5. (Currently Amended) An interface unit as claimed in claim 4 1 wherein said label layer is removably placeable on said outer surface.

[Claim 6 has been amended as follows:]

6. (Currently Amended) An interface unit as claimed in claim 5 1 wherein said label layer is permanently fixed at said outer surface.

[Claim 7 has been amended as follows:]

7. (Currently Amended) An interface unit as claimed in claim 4 1 wherein said signal generator comprises an element placeable on said outer surface together with said label layer and containing machine-readable information unique to said label layer and a reader arrangement for reading said machine-readable information from said element for generating said output signal.

8. (Previously Amended) An interface unit as claimed in claim 1 wherein said signal generator generates said output signal containing a protocol for said mating configuration among said sensor and unit connectors.

9. (Previous Amended) An interface unit as claimed in claim 1 wherein said signal generator emits said output signal containing at least a portion of an electrophysiology examination set-up protocol.

[Claim 10 has been amended as follows:]

10. (Currently Amended) An electrophysiology measurement system comprising:

a plurality of catheter-mounted sensors respectively having sensor electrical connectors associated therewith;

a monitoring system for analyzing signals from said sensors; and

at least one interface unit connected between said sensors and said monitoring system, said interface unit having an outer surface and a plurality of unit electrical connectors disposed at said outer surface, respectively receiving a one of said sensor connectors in a mating configuration and containing an arrangement defining interconnections among said unit connectors, said arrangement being in communication with said monitoring system, and said interface unit further having a signal generator connected to said arrangement for generating an output signal unique to and originating from the interface unit,

designating said configuration and being supplied to the monitoring system via said arrangement, said output signal modifying operation of said monitoring system dependent on said information, and a label layer, placeable on said outer surface, carrying a permanently fixed visible indication of said mating configuration and a humanly readable layer identification code.

C [Claim 11 has been amended as follows:]

11. (Currently Amended) An electrophysiology measurement system as claimed in claim 10 ~~comprising wherein said unit connectors are disposed at an outer surface of said interface unit, and wherein said interface unit has a label layer, removably placeable on said outer surface, carrying permanently fixed visible indications of different sensor/unit connector configurations and a human readable label layer identification code,~~ a housing having a human readable housing identification code, and wherein said signal generator generates said output signal unique to said housing, and wherein said monitoring system has a data presentation device and a processor with label layer identification codes stored therein for predetermined electrophysiology examinations, said processor modifying operation of said monitoring system to present a layer identification code and a housing identification code protocol on said presentation device for a selected one of said examinations.

12. (Currently Amended) An electrophysiology measurement system as claimed in claim 11 ~~10 wherein said unit to connectors are disposed on an outer surface of said interface unit, and wherein said interface unit further has a label layer, removably placeable on said outer surface and wherein said signal generator generates said output signal also unique to said label layer,~~ and wherein said electrophysiology monitoring system has a processor with an indication of at least

one label layer stored therein for each of a number of different predetermined electrophysiology examinations, and wherein said processor compares the label layer identified in said output signal with an indication for a selected electrophysiology study, and modifies operation of said monitoring system dependent on a result of the comparison.

C | 13. (Original) An electrophysiology measurement system as claimed in claim 10 wherein said signal generator generates an output signal containing at least a portion of an electrophysiology examination set-up protocol, and wherein said monitoring system has a processor which receives said set-up protocol and modifies operation of said monitoring system in accordance with said protocol.

14. (Original) An electrophysiology measurement system as claimed in claim 13 wherein said monitoring system comprises a signal switching unit having switch settings controllable by said processor, and wherein said set-up protocol contains information for use by said processor to vary said switch settings dependent on said examination.

15. (Original) An electrophysiology measurement system as claimed in claim 13 wherein said set-up protocol contains information for use by said processor for varying at least one of a presentation format and a type of study data recorded by said monitoring system.
